Community Wildfire Protection Plan

Hay River

Government of
Northwest Territories

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1 Introduction

In 2011, a Community Wildfire Protection Plan (CWPP) was developed for the Town of Hay River to address the hazard and the risk to the community from wildfire. That CWPP was developed to provide practical and operational wildland /urban interface (WUI) risk mitigation strategies to reduce the threat from wildfire to the community.

The original CWPP was developed by Montane Forest Management Ltd in cooperation with the Government of the Northwest Territories (GNWT) and Hay River.

In 2018 the GNWT, Department of Environment and Natural Resources (ENR) updated the Hay River CWPP by using the most recent information, science and expertise available. This included using standardized FireSmart assessment protocols and mitigative measures were developed based on the 7 disciplines of FireSmart.

1. Vegetation Management
2. Development
3. Legislation
4. Public Education and Engagement
5. Inter-Agency Cooperation
6. Cross Training
7. Emergency Planning

The update included:

- The FireSmart mitigation efforts completed around the community
- The change in hazard around the community.
- New recommendations or modification to existing recommendations

Hay River, in cooperation with ENR, implemented some of the original recommendations but there is still work to do.

The update includes recommendations to assist in setting priorities to reduce the threat from wildfire. It is important to note that while implementing these recommendations will reduce the threat from wildfire to structures, it will never completely remove the threat.

This plan should be reviewed regularly to ensure that it remains a priority to the community and its residents.

2 Planning Area and Stakeholders

The planning area includes all lands within the Town of Hay River municipal boundaries **(Map 1).**

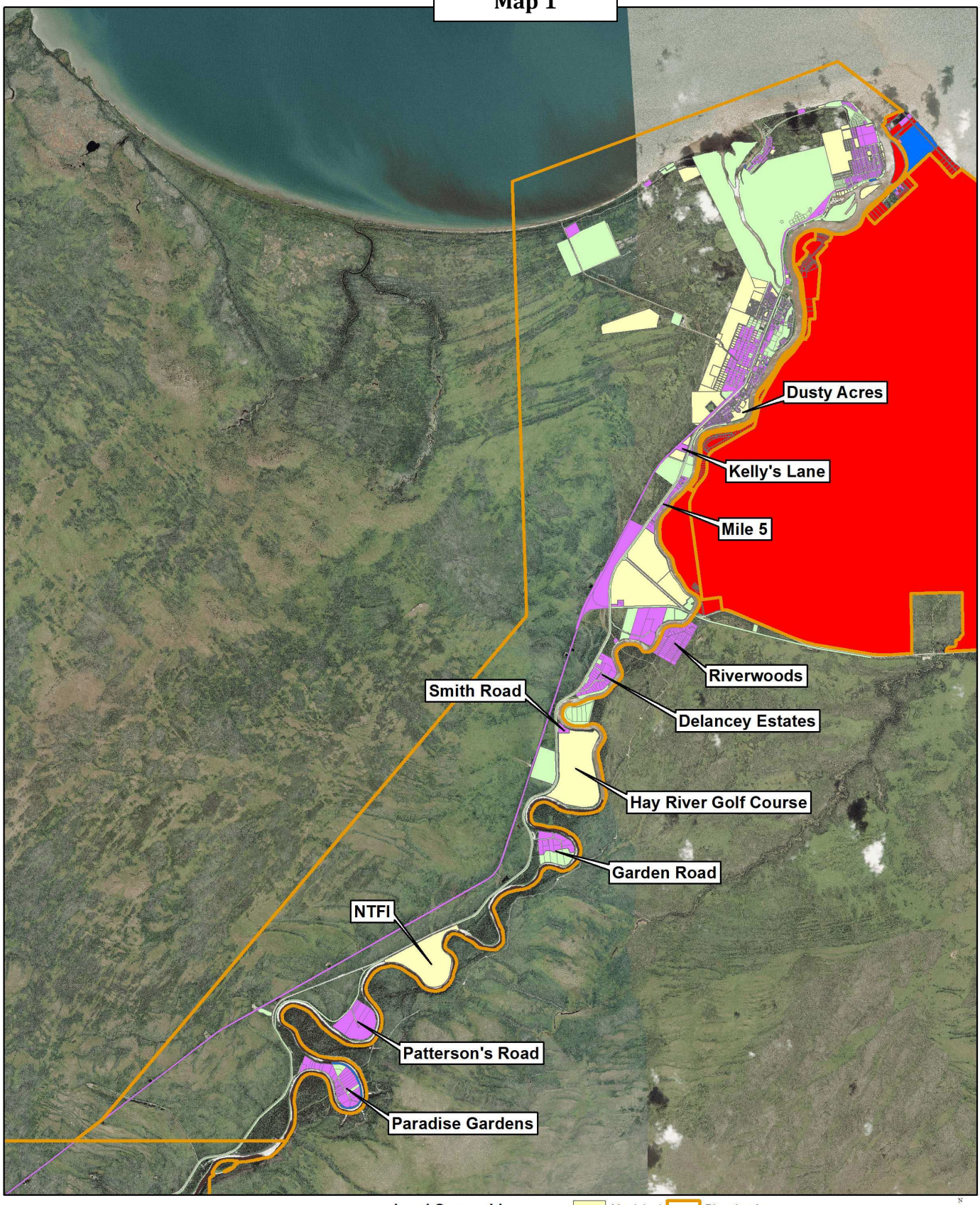
Stakeholders involved in the planning process included:

- Government of the Northwest Territories, Environment and Natural Resources
- Town of Hay River

Land status authority is varied and is represented by the following (Map 1):

- Commissioner
- Hay River Indian Reserve
- Mixed
- Municipal
- Private
- Territorial

Map 1



Hay River
Land Status Authority

Land Ownership

- Commissioner
- Hay River Indian Reserve
- Mixed
- Municipal
- Private
- Territorial
- Planning Area

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3 Hazard & Risk Assessment

In the original 2011 CWPP a hazard and risk assessment was undertaken to determine the potential impact wildfire could have on the community. This was based on an analysis of the historical wildfire ignition sources, fire incidence and the wildland fire potential of the forest surrounding the community.

3.1 Wildfire Ignition Potential

The assessment of recent fire incidence was completed using historical fire data from ENR for the period from 2009 to 2018 and personal conversations with local authorities.

Data within a 10 kilometer radius of the Town of Hay River indicates that the risk of wildfire is high. Fire incidence data indicates a total of 15 incidents in the planning area; 12 human-caused and 3 lightning caused **(Table 1) (Map 2).**

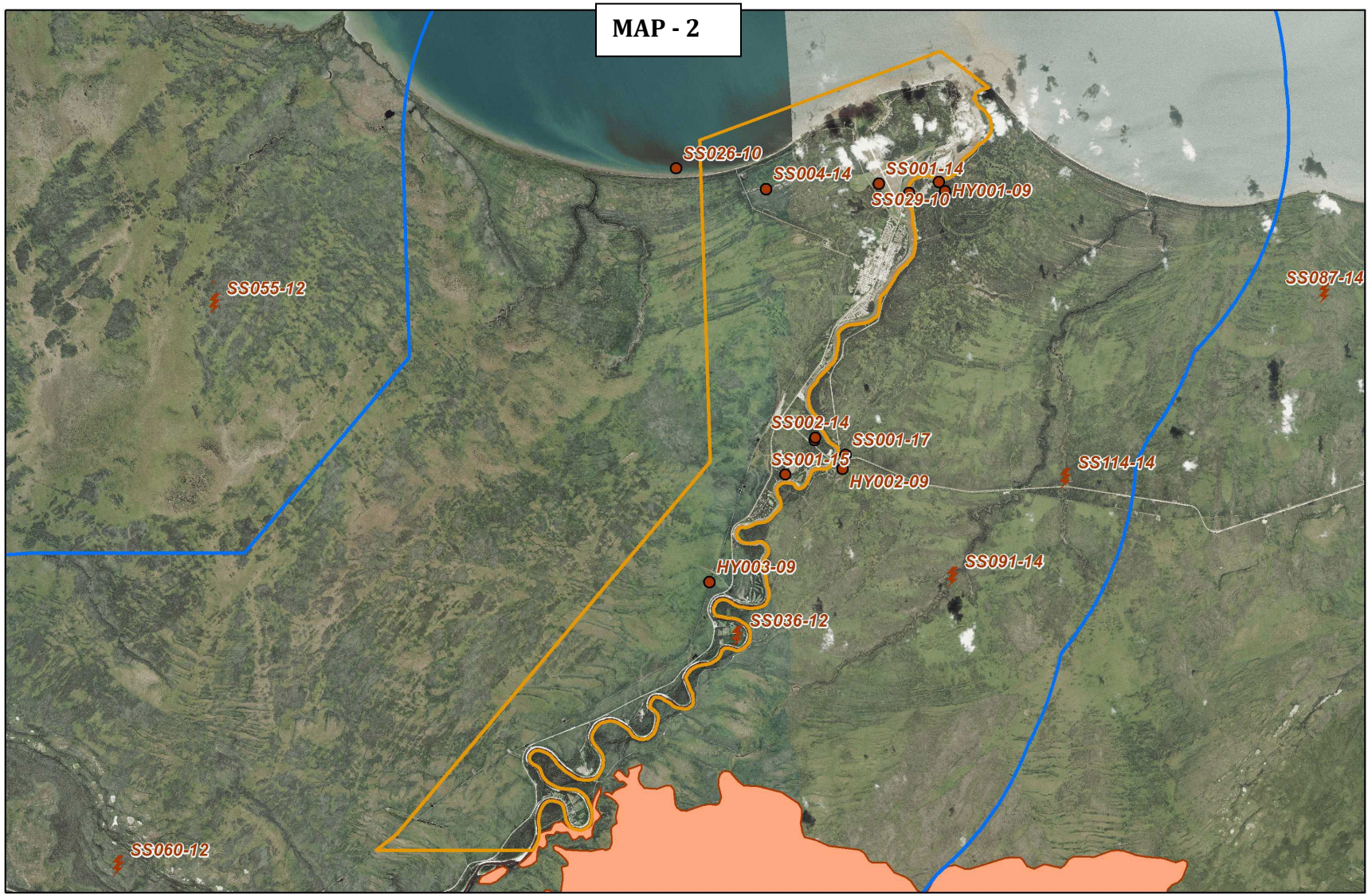
Table 1: Fire Incidence by General Cause (2009 – 2018)

General Cause	Number of Fires	Percent of Total
Human-Caused	12	80.0%
Lightning-Caused	3	20.0%
Totals	**15**	**100.0%**

There were several large wildfires between 1960 and 1995, primarily lightning-caused, including the 1971 wildfire ignited near the Enterprise junction. Recently in 2015, a large lightning caused wildfire located east of the Hay River threatened the community of Enterprise and the Paradise Gardens area.

The Town of Hay River Fire Department reports that the fire department responds to several grass fires annually with the spring season being the most problematic; these grass fires are not included in **Table 1**.

The risk of wildfire in the planning area is high and most frequently occurs in areas accessible to residents and recreating public.



Hay River
Ten Year Fire History

- Planning Area 10km Buffer
- Planning Area
- Large Fire History
- Human Caused
- Lightning
- Unknown

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Meters

Northwest Territories Environment and Natural Resources

3.2 Wildfire Behaviour Potential

3.2.1 Forest Fuel Types

Fire Behavior Prediction (FBP) fuel types (Taylor, 1997) were used to analyze the fuel types and fire behaviour potential within and adjacent to Hay River.

The planning area is characterized with a combination of fuel types including:

- Spruce-lichen woodland (C-1)
- Boreal spruce (C-2)
- Mixed-wood (M-1)
- Deciduous (D-1)
- Deciduous (D-2)
- Cured grass (O1)
- Non-fuel (NF)

The planning area is dominated with boreal spruce (C-2) fuel types with the potential to support intense landscape-level wildfire. The developed areas within the Town of Hay River are primarily non-fuel and cured-grass with patches of deciduous and mixedwood fuel types scattered throughout town. Fuel types within and adjacent to the Town of Hay River rural developments vary significantly and include boreal spruce (C-2), deciduous (D-1) (D-2), mixed-wood (M-1), and cured-grass (O1).

Each of these fuel types can present hazard to interface structures based on fuel moisture conditions and time of year, however it is typically the C-2 fuel types that present the highest wildland/urban interface hazard.

Forest fuels data indicates that the potential for high to extreme wildfire behaviour exists in the Hay River area.

3.3 FireSmart Hazard Assessments

FireSmart hazard assessments (P.I.P., 2003) were conducted on developments and adjacent fuel types within the planning area. The FireSmart hazard assessment process evaluates forest and structural fuel types, structural features, and topography within and adjacent to the development area to consistently quantify the wildland/urban interface hazards within the planning area and to help set priorities for mitigative options.

Developments at the highest risk to wildfire include **(Table 2):**

1. Delancy Estates CR Subdivision
2. Kelly's Lane Rural
3. Riverwood's CR Subdivision
4. Smith's Road Rural
5. West Point Reserve

Hazard factor's for each of the development zones is discussed below.

Table 2: FireSmart Hazard Assessments

Development Area	**Structure/Site Hazard (0 – 30m)**
Town of Hay River	
Paradise Gardens	Moderate
Patterson's Road	Moderate
Garden Road	Moderate
Hay River Golf Club	Low
Smith's Road	Moderate - High
Delancy Estates	Extreme
Kelly's Lane	Extreme
Mile 5	Low
Main Townsite	Low - High
Old Town	Low
West Point	Low - Extreme
Riverwood's CR Subdivision	Extreme

Town of Hay River

Paradise Gardens

FireSmart hazard for Paradise Gardens is **Moderate**. Predominant fuel types include cured-grass (O1), deciduous (D-1), and non-fuel (NF) with the Hay River on the south, east, and north sides of the development. Exterior structure materials are primarily asphalt shingle and metal roofing and wood or vinyl siding. The main access road is an all-weather dead-end design. The highest wildfire threat is from wildfire starting within the development.

Patterson's Road

FireSmart hazard for Patterson's Road is **Moderate**. Predominant fuel types include cured-grass (O1), deciduous (D-1), non-fuel (NF), and boreal spruce (C-2) with the Hay River on the south, east, and west sides of the development. Exterior structure materials are primarily asphalt shingle and metal roofing and wood or log siding. The main access road is an all-weather dead-end design. The highest wildfire threat is from C-2 fuels within and to the north of the development.

Garden Road

FireSmart hazard for Garden Road is **Moderate**. Predominant fuel types include cured-grass (O1), deciduous (D-1), and boreal spruce (C-2) with the Hay River on the north, south, and east sides of the development. Exterior structure materials are primarily asphalt shingle roofing and wood or vinyl siding. The main access road is an all-weather dead-end design.

Hay River Golf Club
FireSmart hazard for Hay River Golf Club and RV Park is **Low**. Predominant fuel types include non-fuel (NF) on the golf course, boreal spruce (C-2) to the north and west with the Hay River to the south and east. Exterior structure materials are asphalt shingle roofing and log siding. The main access road is an all-weather dead-end design.

Smith's Road
FireSmart hazard for the three dwellings on Smith's Road ranges from Moderate to High. Predominant fuel types include boreal spruce (C-2) and deciduous (D-1) with the Hay River on the east and north sides. Exterior structure materials are asphalt shingle and metal roofing and wood or vinyl siding. The main access road is a narrow all-weather dead-end design that does not meet FireSmart access road standards.

Delancy Estates
FireSmart hazard for Delancy Estates country-residential subdivision is **Extreme**. Predominant fuel types include boreal spruce (C-2), deciduous (D-1), and cured-grass (O1) with the Hay River on the south and east sides of the development. Zone 1 defensible space from C-2 fuels is inadequate for many of the dwellings. Exterior structure materials are primarily asphalt shingle and metal roofing and wood, vinyl, or log siding. The main access road is an all-weather loop and dead-end design with adequate turn-arounds.

Kelly's Lane
FireSmart hazard for Kelly's Lane is **Extreme**. Predominant fuel types include boreal spruce (C-2), non-fuel (NF), deciduous (D-1), and cured-grass (O1) with the Hay River on the south side of the development. Exterior structure materials are asphalt shingle roofing and wood or vinyl siding. The main access road is a narrow all-weather dead-end design that does not meet FireSmart access road standards.

Mile 5

FireSmart hazard for Mile 5 development is **Low**. Predominant fuel types include cured-grass (O1), deciduous (D-1), and non-fuel (NF) with the Hay River on the east side of the development. Exterior structure materials are primarily asphalt shingle and roofing and wood or vinyl siding. The access roads are all-weather loop design.

Main Townsite

FireSmart hazard for the Main Townsite area ranges from **Low to High** based on proximity to perimeter fuels. Predominant fuel types include non-fuel (NF), cured-grass (O1), deciduous (D-1) within the developed areas, boreal spruce (C-2) on the west-perimeter, and the Hay River on the east perimeter. Exterior structure materials are primarily asphalt shingle with scattered wood-shake roofing and wood or vinyl with scattered stucco and metal siding. Access roads are all-weather loop and dead-end design meeting FireSmart standards.

Old Town

FireSmart hazard for Old Town is predominantly **Low** with scattered pockets of **Moderate to Extreme**. Predominant fuel types include non-fuel (NF), cured-grass (O1), deciduous (D-1), and boreal spruce (C-2) with the Hay River on the south and east sides. Homes on Lakeshore Drive are at Extreme hazard due to lack of Zone defensible space from C-2 fuels. Exterior structure materials are primarily asphalt shingle and metal roofing and wood or vinyl siding. Access roads are primarily all-weather loop design.

West Point

FireSmart hazard for West Point is predominantly **Low** with some structures at **Extreme** hazard along the east perimeter. Predominant fuel types include non-fuel (NF), cured-grass (O1), and boreal spruce (C-2) with the West-Channel of the Hay River on the west side and Great Slave Lake on the north side. Exterior structure materials are primarily asphalt shingle and metal roofing and wood or vinyl siding. Access roads are all-weather loop and dead-end design.

Riverwood's

Riverwood's is a new CR subdivision located on the south-side of Hwy 5 and east-side of the Hay River, just outside the Town of Hay River and Hay River IR boundaries. FireSmart hazard is **Extreme**. Predominant fuels types surrounding and within the subdivision are boreal spruce (C-2) and mixedwood (M-1). Exterior structure materials are asphalt shingle roofing and wood or vinyl siding. Access roads are all-weather loop and dead-end design.

FireSmart hazard is High/Extreme for several development areas within the planning area. The threat of structure loss to wildfire is significant particularly in the rural areas.

4 Vegetation Management Options

The goal of vegetation management is to create a clear space between the community and the forest to reduce the intensity and rate of spread of wildfire approaching or leaving the community. Vegetation management options are proposed at the appropriate scale, based on hazard and risk, to reduce the threat of wildfire to developed areas. While fuel modification projects reduce the threat of wildfire to developments, they do not ensure structure survival under all hazard conditions.

Vegetation management consists of one or any combination of the following options:

- Fuel removal (remove trees)
- Fuel reduction (thin and prune trees)
- Species conversion (plant less flammable trees)

Complete descriptions of the methods included in each of the above options are included in the link:
https://www.firesmartcanada.ca/mdocs-posts/firesmart-priority-zones-2017/

FireSmart standards refer to the interface priority zones with vegetation management for interface structures recommended in Zones 1 and 1a, 2 at a minimum and in Zone 3 based on hazard and risk.

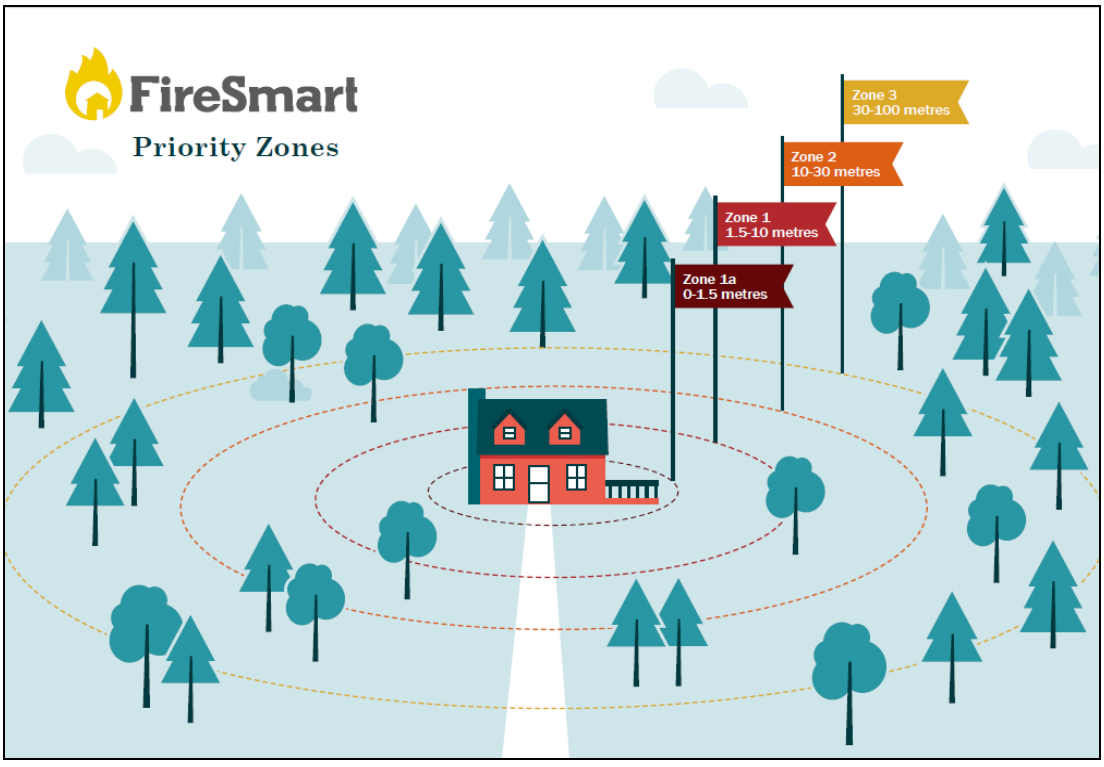


Figure 1– Interface Priority Zones (PIP, 2017)

4.1 Existing Vegetation Management

Fuels removal and reduction projects have been completed within the planning area by the GNWT ENR Department and by the Town of Hay River **(Map 3 & Table 3).**

Table 3: Existing Vegetation Management Areas

Name	Area (ha)	Year	Agency	Comments
Hay River North Fireguard	17.0	1980's	GNWT	Maintain and extend

The Town of Hay River North Fireguard was originally constructed in the mid-1980 and has become overgrown with deciduous and coniferous re-growth. The existing fireguard requires maintenance in addition to extension to provide protection to the current and future Town of Hay River north boundary developments.

4.2 Proposed Vegetation Management

4.2.1 Zone 1a (0-1.5 meters)

Zone 1a vegetation management is **inadequate** for many of the structures due to encroachment of native grass fuels, combustible material piles and coniferous trees located in close proximity of home.

FireSmart Zone 1a vegetation management options include:

- Creating a noncombustible zone around structures by clearing vegetation and combustible material down to mineral soil within 1.5 meters of structures.
- Use noncombustible materials, in this critical zone of 1.5 meters directly adjacent to your home, such as gravel, bricks or concrete.
- Woody shrubs, trees or tree branches should be avoided in this zone and any that are present should be properly mitigated.

Zone 1 (1.5-10 meters)

FireSmart Zone 1 vegetation management options include:

- Removal of flammable forest vegetation within 10 metres of structures.
- Removal of all coniferous ladder fuels (limbs) to a minimum height of 2 metres from ground level on residual overstory trees.
- Removal of all dead and down forest vegetation from the forest floor.
- Increased maintenance to ensure that all combustible needles, leaves, and native grass are removed from on and around structures.
- Establishment and maintenance of a non-combustible surface cover around the structure including the use of FireSmart landscaping species.
- Removal of all combustible material piles (firewood, lumber, etc) within 10 metres of the structure.

For more information on FireSmart Zone 1 standards refer to *FireSmart – Protecting Your Community from Wildfire* (PIP 2003).

Recommendation 1: Encourage residents to establish adequate Zone 1 defensible space around their structures.

4.2.2 Zone 2 (10m-30m) Zone 3 (30m-100m)

Zone 2-3 vegetation management is the responsibility of the GNWT on Commissioner Lands, private landowners and the Town of Hay River on municipal lands **(Map 2).**

Several priority areas are recommended for Zone 2-3 fuels management based on hazard and risk **(Table 4 & Map 3).** The intent is to establish a fireguard west of the main town as the first priority with fuels reduction inside the developed areas as subsequent priorities.

Proposed fuels management areas are conceptual at this time and will require detailed fuels reduction planning to identify fuels management prescription, unit boundaries, and operational constraints.

Recommendation 2: Zone 2-3 fuels reduction and maintenance is the responsibility of the Land Status Authority holder(s) and should be implemented based on the priorities identified in this plan.

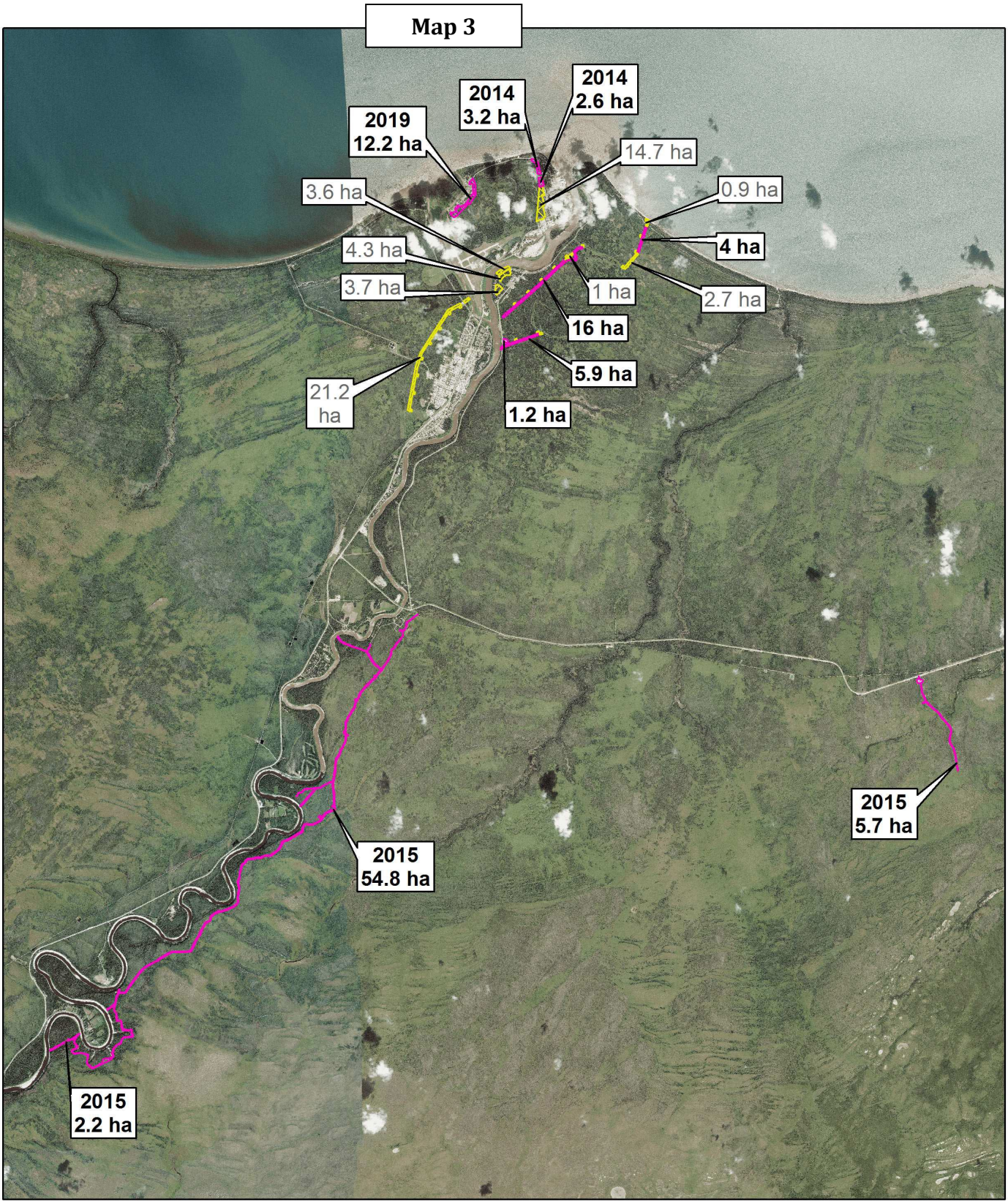
Table 4: Vegetation Management Areas

Name	Area (Ha)	Type	Land Status Authority
Town Fireguard	34.2	▪ Fuels removal to maintain existing and extend fireguard to minimum 40m width ▪ Dispose of debris by piling and burning onsite	▪ GNWT ENR ▪ Commissioner
Delancy Estates	4.1	▪ Fuels reduction to space spruce to 2-3m crown spacing for a minimum 150m wide ▪ Remove all dead standing and dead & down coniferous and deciduous ▪ Retain deciduous overstory stems ▪ Prune limbs to 2 metres ▪ Dispose of debris by piling and burning onsite	▪ GNWT ENR
Old Town	13.5	▪ Fuels reduction to space Spruce/Tamarack overstory and understory to 2-3 m crown spacing for a minimum 100m wide ▪ Remove all dead standing and dead & down coniferous and deciduous ▪ Retain deciduous overstory stems ▪ Prune limbs to 2 metres ▪ Dispose of debris by piling and burning onsite	▪ GNWT ENR ▪ Municipal
West Point	5.2	▪ Fuels reduction to space Spruce overstory and understory to 2-3 m crown spacing for a minimum 100m wide ▪ Remove all dead standing and dead & down coniferous and deciduous ▪ Retain deciduous overstory stems ▪ Prune limbs to 2 metres ▪ Dispose of debris by piling and burning onsite	▪ GNWT ENR
Dusty Acres	6.1	▪ Fuels reduction to space Black spruce understory ▪ Remove all dead standing and dead & down coniferous and deciduous ▪ Retain deciduous & coniferous overstory stems ▪ Prune limbs to 2 metres ▪ Dispose of debris by piling and burning onsite	▪ Commissioner ▪ Municipal
Riverwoods	26.9	▪ Fuels reduction to space Black spruce overstory and understory to 2-3 m crown spacing for a minimum 100m wide ▪ Remove all dead standing and dead & down coniferous and deciduous ▪ Retain deciduous overstory stems ▪ Prune limbs to 2 metres ▪ Dispose of debris by piling and burning onsite	Private /Municipal
Total	**90.0**		

4.3 Vegetation Management Maintenance

Fuel modification area maintenance schedules depend on many factors including fuel type, soil and moisture conditions, and specific weather events. It is suggested that land managers provide periodic inspections of their fuel modification project areas and complete maintenance as required. It is projected that fuel modification maintenance will be required at least each five-year period.

Recommendation 3: Ensure that all existing fuel modification projects are inspected on a regular basis and maintained as necessary to ensure effectiveness. Maintenance should be the responsibility of the land manager or landowner.



Hay River
Fuel Modifications

Completed and Proposed

Fuel Modifications

- Completed
- In Progress
- Proposed

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Meters

Northwest Territories Environment and Natural Resources

5 Development Options

Wildfire Hazard Mitigation

(1) All development occurring at the wildland /urban interface, or in areas with a high or extreme hazard rating as identified in the Fort Smith FireSmart Community Protection Plan, shall incorporate the following mitigation measures:

a. Skirting will be used to enclose any areas under a building or deck with less than 2 meters clearance to the ground.
b. Fire resistant siding materials will be used for all exterior wall finishes.
c. All roofing materials shall have a U.L.C. Class C fire rating.
d. Defensible space for a minimum 10m or to lot boundary.
e. A minimum clearance of 3 meters from combustible vegetation and materials shall be provided around all propane storage tanks

Consideration of wildfire at the planning stage of new development is encouraged to ensure that wildfire hazard and appropriate mitigation measures are developed and implemented prior to development.

New developments may overlap or conflict with existing fuel modification resulting in a reduction in fuelbreak effectiveness and an increase in wildfire threat to the new or existing development in the area.

Recommendation 4: If a new development removes or reduces the effectiveness of any existing or proposed FireSmart mitigation measures or introduces new wildfire hazards, the area must be assessed and measures implemented to maintain the community protection standards.

5.1 Structural Options

Structural characteristics that contribute to a structure's ability to withstand wildfire ignition include type roofing and siding material, structure siting with respect to steeper forested slopes, and proper construction and maintenance of eaves, vents, and openings that can accumulate flammable debris and allow wildfire to gain entry to the structure.

of

Structure design and exterior structural materials may be controlled through municipal development bylaws and regulation while others such as combustible woodpiles locations are best dealt with through public education and awareness.

The most common roofing materials in the planning area are asphalt shingle and metal. There are scattered dwellings in the Town of Hay River with combustible wood-shake roofing materials, putting these structures at higher risk to airborne firebrand ignition. The most common siding materials are combustible wood and vinyl with scattered structures with metal, stucco, log, and hardi-plank siding.

5.2 Infrastructure Options

Infrastructure options include provision of adequate access standards to ensure quick and safe ingress and egress for residents and emergency responders during a wildfire, adequate and accessible water supply for structure protection and suppression, and utility installation standards that do not increase risk to emergency responders during a wildfire emergency.

5.2.1 Access

Access road standards throughout the planning area are mainly adequate for an interface community. Most access roads are all weather loop or dead-end design with adequate turnaround dimensions for fire apparatus.

The access roads to Smith's Road and Kelly's Lane developments are narrow dead-end access which may create ingress and egress problems for residents and responders during a rapidly-moving wildfire.

5.2.2 Water Supply

The Town of Hay River main townsite is municipal hydrant-supplied and Old Town uses dry hydrants. The remainder of development areas in the Town of Hay River and Riverwood's CR subdivision have no dedicated fire suppression water-supply and would rely on water-tender supply for structure protection activities.

5.2.3 Franchised Utilities

Franchised utilities affected by an interface fire include electrical power and fuel. Proper installation and maintenance of these services can minimize the risk to residents and emergency services personnel.

Electrical Power
Power distribution and residential service is provided through above-ground transmission and distribution lines. Some overhead distribution and service lines in the area are at risk to hazard trees which could result in wildfire ignition or downed lines during a wildfire resulting in a risk to emergency responders and a loss of power, and critical services, during the emergency.

Home Heating
Heating distribution is provided by heating oil and propane. Most of the propane tanks have adequate defensible space from wildland fuels.

6 Public Education Options

Public education plays a key role in promoting and implementing FireSmart principles and projects. Residents, landowners, municipal administration, and elected officials all need to be aware of the risk of wildfires and the solutions to minimizing the risk, and need to become a partner in implementation of the solutions in their communities. If stakeholders understand the issues relating to wildland/urban interface hazard they will be more likely to take action on their own property or to support actions taken by other authorities.

Residents and stakeholders can refer to the GNWT ENR, Forest Management Division website at: https://www.enr.gov.nt.ca/en/services/be-firesmart for further information on the GNWT FireSmart program, current wildfire updates, and other wildfire management related information.

Key Messages

FireSmart hazard assessments identified the need for the following key messages to target audiences in the planning area.

Homeowners

Homeowners can increase resiliency of homes and make them less vulnerable to wildfire by development and maintenance of the FireSmart Non-Combustible Zone 1a (0-1.5 metres) and Zone 1 (1.5-10 metres) defensible space surrounding the home, by:

- Clearing vegetation and combustible material down to mineral soil within 1.5 metres of structures.
- Using noncombustible materials in this critical zone of 1.5 metres directly adjacent to your home such as gravel, bricks or concrete.
- Woody shrubs, trees or tree branches should be avoided in this area and any that are present should be properly mitigated
- Storing firewood and other combustible materials more than 10 metres away from the home
- Keeping roof and eaves clear of leaves and other combustible debris
- Creating propane and fuel-tank FireSmart defensible space
- Creating a non-combustible zone for underneath and around any trailers/vehicles and mitigate sheds and other structures to the same standards as those of your home
- If possible and/or applicable maintain Zone 2 (10-30 metres) and Zone 3 (30-100 metres) recommendations, and work with neighbors in any overlapping Priority Zones.

Communities

Communities can reduce wildfire risk and adopting FireSmart principles by:

- Holding a FireSmart Wildfire Community Preparedness Day or workshop
- Using local government websites, social media and newsletters to promote FireSmart principles
- Asking ENR staff what educational and/or promotional resources they have available, such as: wildfire information pamphlets, posters, educational resources, videos etc.
- Applying for the FireSmart Community Recognition Program. For more information visit: https://www.firesmartcanada.ca/firesmart-communities/firesmart-canada-community-recognition-program/

Recommendation 5: Public education on acceptable FireSmart Zone 1a and Zone 1 standards is recommended for all Hay River residents

7 Inter-Agency Cooperation and Cross-Training Options

Interagency cooperation and cross-training between all stakeholders is necessary to ensure cooperative and effective implementation of wildland/urban interface mitigation options and to coordinate an effective response to a wildland/urban interface fire. Since 2016, and yearly thereafter, ENR conducted basic Wildland/Interface Fire Operations training with the Hay River Volunteer Fire Department members. Refresher training should be conducted each spring.

Interagency stakeholders within the planning area include:

- Town of Hay River
- GNWT

Cross-training for wildland/urban interface response personnel should include wildland fire, wildland/urban interface fire, and incident command system training courses.

The following cross-training courses are available.

Wildland Fire

- Wildland Firefighter (NFPA 1051 Level I, S-131, or equivalent)

Wildland/Urban Interface Fire

- Structure and Site Preparation Workshop (S-115)

Incident Command System

- ICS Orientation (I-100)
- Basic ICS (I-200)
- Intermediate ICS (I-300)

Recommendation 6: The Town of Hay River Fire Department members and the GNWT should partner on cross-training initiatives to ensure emergency responders are cross-trained to the following:

- Wildland Firefighter
- Structure and Site Preparation Workshop (S-115)
- Incident Command System (I-100 to I-300) as applicable

8 Emergency Planning Options

Emergency preparedness is an important part of any disaster planning. The need for organization, clear chain of command, and an understanding of job responsibilities during an interface fire are of paramount importance.

At present the Town does not have a wildfire pre-plan to provide emergency responders with detailed tactical information with respect to values at risk and operational strategies and tactics to minimize losses during a wildland/urban interface fire. A suggested outline is as follows:

- Planning Area Jurisdictional Authority
- Values at risk (life, structures, infrastructure)
- Fire operations plan (strategies/tactics, water sources, equipment, communications plan)

Recommendation 7: Develop a Community Wildfire Pre-Plan for the Town of Hay River to provide greater operational detail to emergency responders during a wildland/urban interface incident.

9 Recommendations Summary

Vegetation Management

Issue	Recommendation	Responsible Agency
Zone 1	**Recommendation 1:** Encourage residents to establish adequate Zone 1 defensible space around their structures.	Town of Hay River
Zone 2-3	**Recommendation 2:** Zone 2-3 fuels reduction and maintenance is the responsibility of the Land Status Authority holder(s) and should be implemented based on the priorities identified in this plan.	Town of Hay River
Maintenance	**Recommendation 3:** Ensure that all existing fuel modification projects are inspected on a regular basis and maintained as necessary to ensure effectiveness. Maintenance should be the responsibility of the land manager or landowner.	GNWT Town of Hay River

Development

Issue	Recommendation	Responsible Agency
FireSmart Development Planning	**Recommendation 4:** If a new development removes or reduces the effectiveness of any existing or proposed FireSmart mitigation measures or introduces new wildfire hazards, the area must be assessed and measures implemented to maintain the community protection standards.	Town of Hay River GNWT

Public Education

Issue	Recommendation	Responsible Agency
Public Education Priorities	**Recommendation 5:** Public education on acceptable FireSmart Zone 1a and Zone 1 standards is recommended for all Hay River residents.	GNWT Town of Hay River

Interagency Cooperation & Cross-Training

Issue	Recommendation	Responsible Agency
Cross-Training	**Recommendation 6:** The Town of Hay River Fire Department members and GNWT should partner on cross-training initiatives to ensure emergency responders are cross-trained to the following: ▪ Wildland Firefighter ▪ Structure and Site Preparation Workshop (S-115) ▪ Incident Command System (I-100 to I-300) as applicable	GNWT Town of Hay River

Emergency Planning

Issue	Recommendation	Responsible Agency
Community Wildfire Pre- Planning	**Recommendation 7:** Develop a Community Wildfire Pre-Plan for the Town of Hay River to provide greater operational detail to emergency responders during a wildland/urban interface incident.	GNWT Town of Hay River